

Title (en)

Method for producing a protective atmosphere for heat treatment furnace and heat treatment apparatus

Title (de)

Verfahren zur Schutzgasversorgung eines Wärmebehandlungsofens und Wärmebehandlungsanlage

Title (fr)

Procédé pour la production d'une atmosphère protectrice pour four de traitement thermique et installation pour traitement thermique

Publication

EP 0794263 B1 20010425 (DE)

Application

EP 96109800 A 19960618

Priority

DE 19608894 A 19960307

Abstract (en)

[origin: EP0794263A1] Supplying protective gas of a heat treatment furnace having several chambers or zones comprises removing carbon dioxide (CO₂) from the combustion gas using a membrane device connected to a gas condenser and a compressor so that the water vapour amount in the exhaust gas is removed. A gas fraction of more than 95% purity containing predominantly nitrogen is produced and used in the same furnace as protective gas. This protective gas is fed into the furnace separately from the generated product gas. Also claimed is a heat treatment plant.

IPC 1-7

C21D 1/76

IPC 8 full level

C21D 1/76 (2006.01); **C23C 8/20** (2006.01)

CPC (source: EP)

C21D 1/76 (2013.01); **C23C 8/20** (2013.01); **Y02P 10/122** (2015.11)

Cited by

CN114370771A; AT502238B1; EP0860512A3; US7875235B2

Designated contracting state (EPC)

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EP 0794263 A1 19970910; **EP 0794263 B1 20010425**; AT E200800 T1 20010515; DE 19608894 A1 19970918; DE 59606823 D1 20010531; ES 2158195 T3 20010901

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EP 96109800 A 19960618; AT 96109800 T 19960618; DE 19608894 A 19960307; DE 59606823 T 19960618; ES 96109800 T 19960618